





VILLAGE OF SMITHTON

COMPREHENSIVE PEDESTRIAN AND BIKE PLAN

The Village of Smithton Pedestrian and Bike Plan was pursued by the Village of Smithton to investigate and determine the most suitable and appropriate pedestrian and bicycle routes for residents and visitors of Smithton. The Plan provides the Village with projects and policies necessary to create a bicycle and pedestrian-friendly community, reduce air pollution, encourage economic development and recreation, and plan for a well-designed, connected, and efficient multi-modal transportation system.

July 2022



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INTRODUCTION

The Village of Smithton (Village) has an estimated population of 3,700 people. The Village has experienced significant growth in the past 35 years, more than doubling in size since 1980, and adding more than 1,400 people between 2000 and 2010. With the recent growth, the Village has expanded north and south creating newer neighborhoods further from the center. This makes it harder for residents not traveling via motorized vehicle to get around. Additionally, the Village is bisected by a major state route, IL 159. This high-speed, high-volume roadway creates issues for bicyclists and pedestrians trying to make their way from the outer reaches of the Village into the center of town and the business district.

The Village has previously held a few public meetings with the members of the community to introduce ideas and areas of improvement throughout the Village, particularly along the main corridor of Main Street. Through these meetings, the Village was able to construct a "Great Streets Initiative," which details plans of improvements that could be made to better the Village as a whole. Some of those improvements will be explored in this Pedestrian and Bike Plan.

Gonzalez Companies, LLC (Gonzalez) has also hosted several meetings with residents of the Village focused specifically on bike trails and pedestrian travel. The initial meeting was hosted on September 15th, 2021, at the Senior Center after being advertised around the Village. During the meeting, which nearly 50 residents attended, there was a discussion with the public about current travel conditions, and input was given on where they wanted and did not want future paths to be located. Gonzalez distributed a survey for attendees to fill out regarding their walking and biking habits. A total of 46 surveys were collected.

On May 4, 2022, a second meeting was held in which the recommendations outlined within this report were presented to those in attendance. A second survey was conducted to gather the opinions of the residents and has been summarized in the later section of this report. At the second meeting, 16 residents provided input on their opinions of the direction for the proposed pedestrian and bicycle accommodations.



GUIDING PRINCIPLES

Recommendations in the Village's Pedestrian and Bicycle Master Plan utilized the following guiding principles:



- A. **Safety for All Street Users** Make the Village a safe place for all street users through coordinated efforts to educate community members, enforce rules of the road, install appropriate safety measures, and regularly evaluate safety conditions.
- B. Complete Streets Make bicycling and walking safe and convenient modes of transportation for all users, of all ages and abilities, by developing a continuous network of safe bikeways and pedestrian facilities throughout the Village. Regularly evaluate and repair or replace existing sidewalks and bike facilities. Plan additional facilities where needed and implement with scheduled road work.
- C. **Connect Neighborhoods** Create pedestrian and bicycle connections within neighborhoods to neighborhood destinations (e.g., schools, shopping, parks) and to each other.
- D. **Connect the Regional Network** Connect the Village to the regional system of trails, bikeways, and pedestrian routes by coordinating with neighboring communities, counties, townships, and the Illinois Department of Transportation (IDOT).
- E. **Promote Economic Development and Tourism** Create walkable business districts and bicycle/pedestrian connections to parks, neighborhoods, and shopping areas.

IMPORTANCE OF WALKING & CYCLING FOR THE VILLAGE

The Village has business and commercial buildings located along the IL 159 corridor with residential areas throughout the east and west, and several neighborhoods to the north and south. With the Village being along a state route, it can be difficult and unsafe for residents to use non-motorized travel to visit the downtown area. The Village also has a cemetery, a senior center, churches, and a park with several ball fields, a tennis court, a basketball court, and a walking trail located south of the downtown area. The Village has added small connecting trails to allow for some of the neighborhoods just south of this area to access these amenities, but while the Village continues to expand further south these residents lack the ability to visit these areas without the use of a vehicle.



SURVEY RESULTS

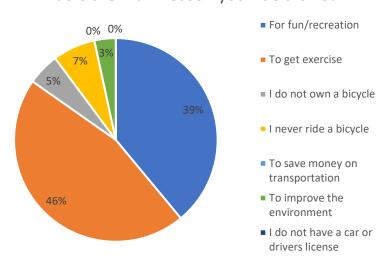
The survey for the Village's Pedestrian and Bike Plan was provided to all attendees at the public meeting hosted by Gonzalez on September 15th, 2021. Out of the 48 residents who attended, 46 surveys were collected.

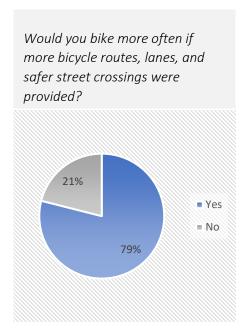
Bicycling Section Summary

Of the surveyed residents only 12% said that they do not own a bike or never ride a bike. For the residents that do ride their bikes around town, most of them (85%) ride for fun/recreation and to get some exercise.

Nearly 80% of the people surveyed indicated that they would bike more often if the Village had more bicycle routes, lanes, and safer street crossings. Currently, there are about 11% of Village residents who bike regularly (at least once a month) around the Village to local points of interest to do things such as shop, run errands, or go out to eat. All of the categories below have some residents that gave the response of "never, but I would like to" with the highest response being 17% wanting to run errands. With better access to the center of town from the farther neighborhoods, these respondents would hopefully move into the category of rider who bikes regularly.

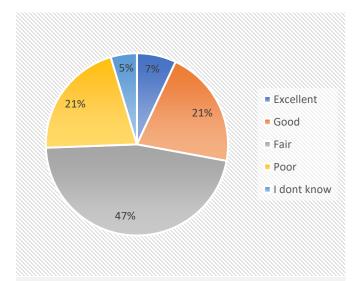
What is the main reason you ride a bike?





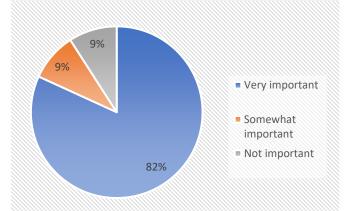


Value of Walking & Biking Summary



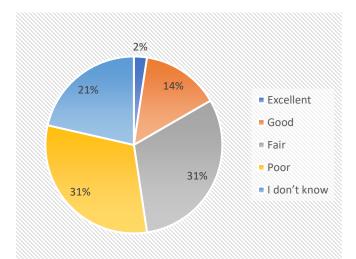
How would you rate the conditions for walking in Smithton?

The vast majority of respondents (75%) said that the walking conditions in Smithton were either Excellent, Good, or Fair. The remaining 25% indicated that the walking conditions were either poor or that they did not know.



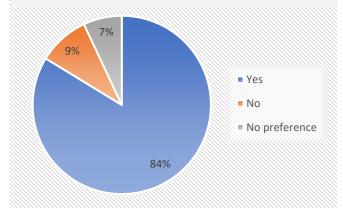
How important to you is improving walking and bicycling conditions in Smithton?

82% of surveyed residents believe that it is particularly important to improve the walking and biking conditions. Only 9% answered that they think it is not important.



How would you rate the conditions for bicycling in Smithton?

Just under half (47%) of respondents stated that the bicycling conditions were either Excellent, Good, or Fair. Roughly a third (31%) responded saying that biking conditions were poor, and the remaining 21% did not know or have an opinion on the bicycling conditions.



Do you think the Village of Smithton should consider non-motorized transportation (i.e., walking and bicycling) as a priority?

Similarly, 84% of people thought that Smithton should consider making non-motorized transportation a priority for the Village.



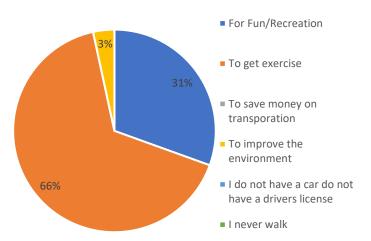
Walking Section Summary

Almost everyone that was surveyed (97%) stated that they either walk for exercise (66%) or for fun/recreation (31%). With the other responses being to help the environment (3%). None of the respondents indicated that they walked due to a lack in ability or resources to drive.

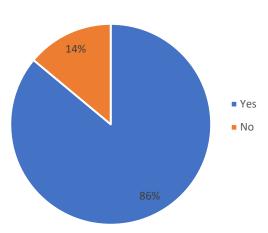
Similarly, for the biking section, a large majority (86%) of residents would decide to walk more if the Village had new sidewalks, trails, and road crossings throughout. In previous public meetings, the Village has reached out to the residents on possible road crossing locations to improve pedestrian travel and safety along Main Street.

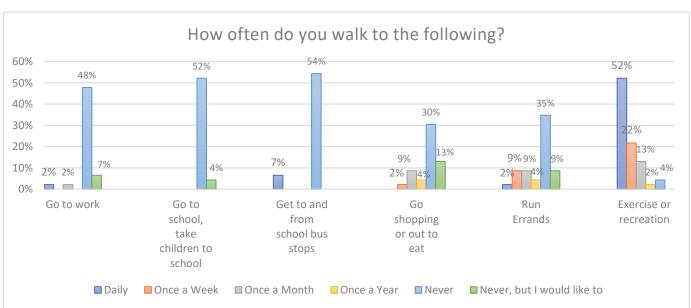
Congruent with the chart above, the majority of people that walk regularly, at least once a month, are walking for exercise or recreation. Between 15% to 18% of respondents regularly walk to run errands, shop, or go out to eat in the Village. There were also a few people that said they regularly walk to work or to a bus stop for school.

What is the main reason you walk?



Would you walk more often if new sidewalks, trails, and road crossings were provided?

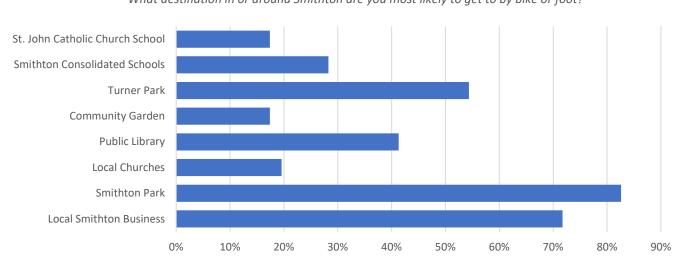






Destinations for Pedestrian Travel

In the survey, people were asked "What destinations in and around Smithton would you most likely get to by bike or foot?" and were provided with several options to choose from, and a few blank spaces to fill in any additional locations. The location receiving the highest number of votes (83%) was Smithton Park, which is located just south of Main Street and has several recreational fields, courts, and a trail that surrounds a pond. Also, 72% of residents indicated that they would enjoy walking or biking to several local businesses throughout the downtown area. Residents also showed interest in traveling to the local schools and churches in the Village.



What destination in or around Smithton are you most likely to get to by bike or foot?

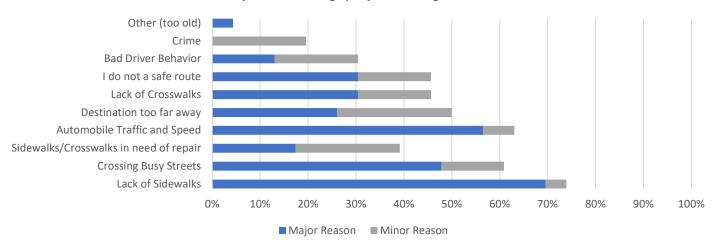
Discouraging Factors

The largest reasons people are discouraged from walking around the Village are lack of sidewalks (70%), and automobile traffic and speed (57%). The Village currently does not have many sidewalks that parallel the streets of neighborhoods, but has a mile long stretch of sidewalk that runs along both sides IL 159/ Main Street. As mentioned before, the Village is located along the IL 159 corridor, which has a speed limit of 45 mph on the edges of town and 35 mph through town.

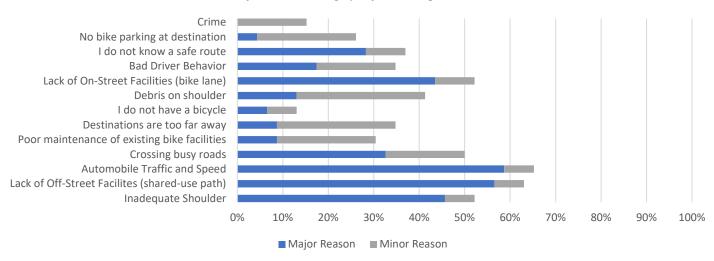
Respondents shared similar responses on why they are discouraged from biking in the Village, with the highest responses being automobile traffic and speed (59%) and lack of facilities on and off street (43% and 57% respectively). Inadequate shoulder width also ranked highly as a discouraging reason people are not biking, at 46%.



What factors discourage you from walking in Smithton?



What factors discourage you from biking in Smithton?





EXISTING CONDITIONS SUMMARY

Sidewalks

In many of the neighborhoods in the Village, there is a lack of sidewalks and pedestrians currently use the roadway or shoulders to walk and bike around. However, along the downtown area, the Village has sidewalks along both sides of Main Street that are 5 feet wide, with a greenspace buffer, and are generally in fair condition. South of the downtown area, the Village constructed newer sidewalk on the west side of IL 159 in 2015, that is 5 feet wide with a 30 feet buffer that allows for a drainage swale to



drain the roadway. The Village has been striving to make improvements for pedestrian travel by adding a southern extension to the sidewalk on the west side of IL 159. They have also proposed a reconfiguration of Main Street to allow for a two-way left turn lane and removing parking on both sides of the road. The removal of parking will allow for more room on the east side of the road for pedestrian traffic.

Trails & Bicycle Facilities

The Village currently uses an on-road trail system with signage and "sharrows" to allow for residents to travel between neighborhoods, visit downtown, and visit the Village park. The Village park has a 5 feet wide asphalt walking trail that navigates throughout the park and surrounds a pond on the east side. This trail also has a connection between a cul-de-sac on Horseman Ridge and one on Barleyridge Drive to provide residents access to the park without the use of a vehicle. The trail currently does not meet the standards of a shared-use trail as it would need to be widened to a minimum of 8 feet, and also maintain a maximum longitudinal slope of 5% and transverse slope of 2%



Crosswalks

The Village currently only has two marked crosswalks across IL 159. One is at South Street and the other at Breckenridge Street, which gives notification of pedestrians wanting to cross the major corridor. Each of these crosswalks have a parallel bar pavement marking, which are faded along the vehicle wheel paths. These crosswalks do have pedestrian-activated flashing beacons.



WHO IS THIS PLAN FOR?

Generally, there are four types of bicyclists:

Strong and the Fearless cyclists will ride regardless of roadway conditions. They are 'bicyclists': riding is a strong part of their identity, and they are generally undeterred by roadway conditions; however, facilities need to be made as safe as possible as they are not immune to interactions with auto traffic.



Enthused and Confident cyclists are comfortable sharing the roadway with automobile traffic, but they prefer to do so operating on separated facilities, such as bike lanes and improved shoulders. They are attracted to riding when the streets have been redesigned to make them work well for bicycling.

Interested, but Concerned is the most common type of cyclist. They are curious about bicycling. They are hearing messages from a wide variety of sources about how easy it is to ride a bicycle and about the need for people to lead more active lives. They like riding a bicycle, and they would like to ride more, but are afraid to ride. They get nervous thinking about riding near speeding traffic. They rarely ride for transportation—perhaps they will ride through their neighborhoods to the local park or coffee shop, but they will not venture out onto the arterials to the major commercial and employment destinations they frequent. They would ride if they felt safer on the roadways.

No Way, No How cyclists are currently not interested in bicycling at all, for reasons of topography, inability, or simply a complete and utter lack of interest.

The Village's Pedestrian and Bicycle Plan is geared towards the 60% of people who are "Interested, but Concerned". If we create places where they feel safer and more confident, they will ride more.

ENGINEERING REFERENCES

The recommendations made in this plan should be used as a framework for developing more detailed design-engineering plans during subsequent implementation. The recommended routes and trails are consistent with the bicycle facility design material and typical sections in the IDOT's Bureau of Design and Engineering Manual. They also reflect the guidance presented in the American Association of State and Highway Transportation Official's (AASHTO's) Guide for the Development of Bicycle Facilities and the Manual on Uniform Traffic Control Devices (MUTCD). The National Association of City Transportation Officials (NACTO) have created the Urban Bikeway Design Guide and Urban Street Design Guide for use in cities.

These documents are the current design standard for reference information in the development of bicycle facilities. Note: The full documents should be consulted in the design-engineering and implementation phase of this plan.

FACILITY RECOMMENDATIONS

There are three categories recommended for the Village's Comprehensive Pedestrian and Bike Plan.

- 1. Low-Speed Shared Street
- 2. Shared-use Path
- 3. Improved Pedestrian Crosswalks



Low-Speed Shared Street

Why: Shared streets allow for drivers and non-motor travelers to feel safe sharing the roadway to reach their desired destinations.

When: Shared lanes are used for minor roads with low volumes (generally less than 1,000 vehicles per day) such as neighborhood streets.

How: Shared lanes can be implemented in quickly and cost-effective ways. Some include adjusting lane widths via restriping to create a wider lane, removing, or adjusting travel or parking lanes, and adding signage.





Shared-use Path

Why: Shared-use paths provide a safer separated travel path for non-motorized pedestrians, which typically serve as a connection between points of interest within the cities/towns.

When: Shared-use paths are typically used when adjacent roadways have higher speeds, which could discourage pedestrians from travelling on the roadway. They can also supplement networks of shared lanes to promote travel within the community.



How: Shared-use paths are typically 10 to 14 feet wide

and constructed out of asphalt or concrete. In some circumstances, the width can be reduced to 8' wide. This width allows for pedestrians to comfortably travel in opposing directions while staying on the path. These paths also are designed to accommodate ADA guidelines to ensure travel for everyone.



Improved Pedestrian Crosswalks

Why: Improved pedestrian crosswalks provide a safer way for pedestrians to cross busier roads and grab the attention of drivers as they approach to reduce the risk of incidents.

When: Improved pedestrian crosswalks can be used when there is a high volume of pedestrian traffic that desires to use both sides of a roadway. They can also be used in areas where there is reduced sight distances for approaching drivers.

How: Pedestrian crosswalks can be improved by adding curb extensions at road intersections, which can lessen the distance required to cross the road and reduce driver speed with narrower lanes. Another way to improve pedestrian crosswalks is adding rectangular rapid flashing beacons (RRFB). These beacons when activated display a flashing light that indicates to drivers that a pedestrian is attempting to cross the roadway. Stop lights or High Intensity Activated Crosswalk Systems (HAWK) can also be an alternative to increasing pedestrian safety at crosswalks. HAWK beacons are overhead stop lights that typically remain unlit until activated by a pedestrian desiring to cross the street. They then function as a normal traffic signal stopping traffic to allow for people to cross.











RECOMMENDATIONS FOR IMPROVEMENTS

Off-Road Connection to the South

To connect the current loop, it is recommended that the Village add pathways from the southern neighborhoods in order to connect these areas to the existing on street systems. This can be accomplished through a number of different options as depicted in Appendix A.

- Option 1A This option would be construction of an off-road shared-use path, which would parallel Knab Road from Summer Oak Drive for approximately 2.25 miles.
- Option 1B To finish the connection from Knab Road into town several spur lines have been identified. The trail may either diverge from Knab Road near the 90-degree curve west of IL 159 and either connecting to the existing on-road trail of Baywood Lane or continue north on Sand Rock Road where a new on road facility could be established.
- Option 1A/2 Another option to connect the off-road shared-use path would be to continue on Knab Road over to IL 159. A separate off-road facility would need to be established from this point north paralleling IL 159. This would also include a bridge over the West Fork Richland Creek. The Village would also need to either improve the existing conditions of the off-road trail in the park or continue along IL 159 until Memorial Drive.
- Option 1C This option would connect to a portion of Option 1A and diverge to the north with an off-road shared-use path near Westfork Club Road before connecting into Sand Road similar to Option 1B.
- Option 2 For this option, an off-road shared-use path would parallel IL 159 from White Oak Drive for approximately 2.5 miles before terminating at Memorial Drive. This shared-use path would also include a bridge over West Fork Richland Creek. With this option, the Village would also need to either improve the existing conditions of the off-road trail in the park or continue the path along IL 159 until Memorial Drive.

An off-road typical has been provided in Appendix B. Appendix C includes detailed opinions of probable costs for each of the different options. These improvements should be considered a high priority.

Improvements to the Existing Infrastructure (Park Trail)

It has been noted that the existing park trail is of great importance to many of the residents in the Village and is widely used and appreciated. This trail provides connectivity from the southern neighborhoods and subdivisions to the complete street loops. The condition of the existing trail should be considered as fair condition. The Village should continue to monitor its condition and make regular repairs and provide continual maintenance. As funds become available and conditions continue to deteriorate, widening of the trail and improvements to provide for ADA compliance should be undertaken.

An off-road typical has been provided in Appendix B, which should be referenced for these improvements. Appendix C includes costs per foot for the improvements to the existing infrastructure. These improvements should be considered a medium priority.

Complete Streets Loop

Currently, the Village has an existing "Complete Streets" walking and biking route along the west and east sides of the Village. This route connects residents from the Autumn Ridge neighborhood all the way to the north end of the Village. The route is marked with "Share the Road" signs and road markings. Improvements to these existing pathways could be made through a number of different ways. The pathways could be improved by providing



surface improvements, better delineation of pavement markings and way finding signage. These improvements are recommended to be considered a low priority. Cost estimating for improvement per foot have been included in Appendix C.

Improved Pedestrian Crossing

Residents of the Village have stated that they would like to have more crosswalks across Main Street (IL 159). It is recommended to either improve or add pedestrian crossings at Sunset Court, Stoerger Street, South Street, Smithton Franklin Cemetery, the Smithton Senior Center, and Sand Rock Road.

There is no more than a third of a mile between crosswalk locations giving residents several opportunities to safely cross Main Street. These enhanced crosswalks would be constructed with ADA compliant curb ramps, a high-visibility crosswalk, signage, and possible Rectangular Rapid Flashing Beacons (RRFB).

Another popular way to enhance the safety of pedestrians using crosswalks is the addition of curb extensions. Curb extensions allow for the curb ramp to protrude into the roadway causing drivers to slow down in these areas and draw attention to the pedestrians attempting to cross the road.

Another recommended option for improvements to the pedestrian crossings would be to add a pushbutton actuated traffic signal, which would stop traffic allowing for safer crossings.

Each of these options would require consultation with IDOT. It is recommended that these types of intersection improvements be undertaken with other roadway improvement projects planned for IL 159 as discussed in the following section. These improvements should be considered a high priority.

Two-Way Left Turn Lane (Douglas to Fischer CMAQ)

The Village has applied for Congestion Mitigation and Air Quality Improvement (CMAQ) funding to reconstruct Main Street north of downtown from south of Douglas Creek to Fischer Street. The application proposed an addition of a two-way left-turn lane (TWLTL) and two 12 feet through lanes in place of two 11 feet through lanes and two 9 ½ feet parking lanes. This application also proposed an 8 feet shared-use path along the east side of Main Street in this corridor. After these improvements, the Village also plans to continue these improvements to the south end of downtown from Franklin Street to Sand Rock Road by adding a TWLTL as well. The proposed shared-use path (mentioned above) would connect residents to these new improvements to the downtown area. The Village should consider the inclusion of pedestrian improvements concurrently with this project and future projects.

Future CMAQ Funded Projects - Roundabout (Hickory Street and Stonefield Drive)

Along with the bi-turn lane on the north section of Main Street the Village is also exploring the possibility of improving the geometry and safety of the intersection of Hickory Street and Stonefield Drive with N Main Street. The Village would like to install a four-leg roundabout improving driver and pedestrian safety as well as serving as a "gateway" for the Village. Hickory Street currently intersects N Main Street approximately 750 feet north of Stonefield Drive, so the Village would need to acquire some open field right-of-way in order to adjust the skew of the road and create the four-way intersection. The intersection improvements should be considered along with projects like these as stated in the Village's Complete Street planning document.

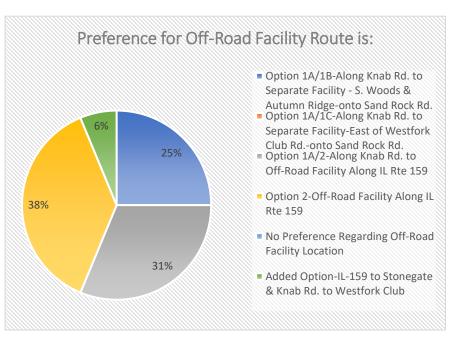


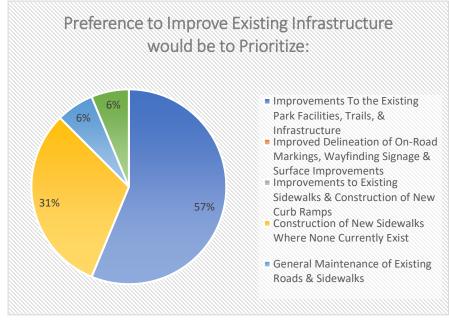
PUBLIC INPUT ON RECOMMENDATIONS

Before finalizing the report Gonzalez hosted a second public meeting on May 4, 2022, at the Senior Center to present some of the options to the residents and gather their input on preferences for the possible routes and improvements. During that meeting 18 residents attended and provided 16 total surveys indicating their preferences. Below are the results of the survey.

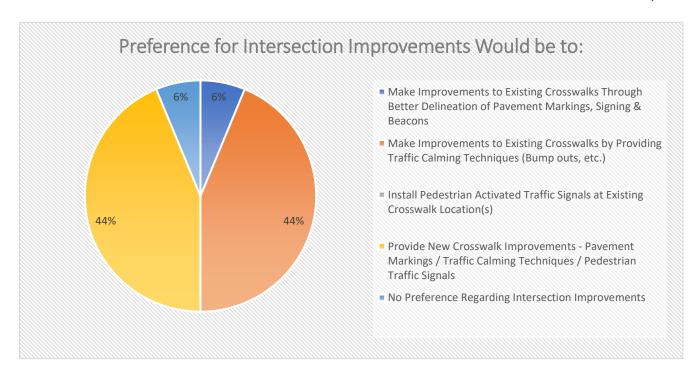
The first question for the residents was "Which off-road facility would you prefer?"As mentioned earlier in the report, Option 1 is a route that parallels Knab Road and has a few different options regarding the route's terminus. Option 2 is a route that parallels IL 159. The preferences for the residents concerning an off-road facility were split with 25% selecting Option 1A/1B, which does not include any off-road facility along IL 159, 38% selected Option 2 which does not include any off-road facility along Knab Road, and 31% selecting a route that combines the two by paralleling Knab Road and then continuing onto IL 159 and into town.

The second question provided to the residents was where they would like the Village to prioritize improvements to existing infrastructure. Over half (57%) of respondents selected that they would prefer the Village prioritize improving the existing park facilities, trails, and infrastructure. Nearly a third (31%) of respondents indicated they would like to see more sidewalks constructed throughout the Village to help increase the ease of travel and safety.

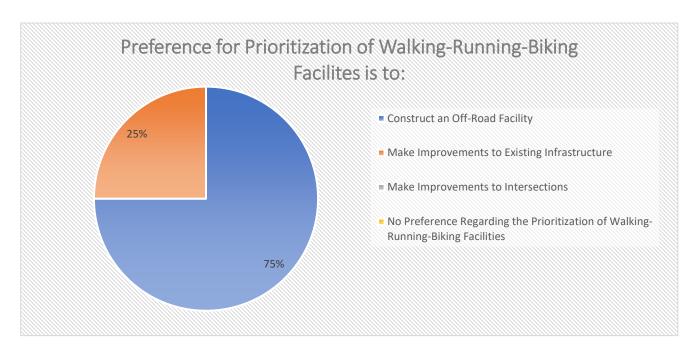








The third topic residents were asked to respond to was their preference to intersection improvements along IL 159. During the presentation Gonzalez provided examples of different ways to improve pedestrian travel across the roadway. The two improvements that received the most votes, 44% each, were Improving existing crosswalks by providing traffic calming techniques like bump outs, etc. and providing new crosswalk improvements along IL 159 to provide residents with more opportunities to safely cross the roadway. Many residents at the meeting voiced their opinion on the dangers of crossing this busy roadway and were passionate about improving the public safety.





The final question on the survey was how the residents would like the Village to prioritize improving these three different aspects of pedestrian and bicycle travel. The vast majority, 75%, of respondents stated they would prefer the Village constructed the off-road facility to increase non-motorized travel and connectivity within the Village. The rest of the respondents, 25%, selected improving the existing infrastructures as a priority for the Village.

ACTION PLAN/GOALS

General Action Plan, Vision and Goals

Public Involvement

The Village has already completed several public meetings discussing improvements for pedestrian travel throughout the Village. The Village had a core group of residents with strong views showing support and interest in the project, while there was also some views of hesitation and disdain toward the plan. In order for the plan to be successful, the Village should continue to gain support for any of the improvements through continued public outreach.

Main Street/IL 159 Travel

The Village has begun planning for improvements to Main Street to better accommodate vehicular movement. Improvements to pedestrian and bicycle travel will also be completed as a part of the process as a requirement of the "Complete Streets". Since the Village has completed a CMAQ application to reconstruct a section of North Main Street from Sunset Drive to Buchanan Street, which would convert the two-lane road with a parking lane on each side into a two-lane road with a two-way left turn lane (TWLTL) in the middle and additional room to convert the sidewalk on the east side of the road into a shared use path.

In the Village's Great Streets Initiative, they have also proposed continuing this improvement along other sections of Main Street, IL 159, to Sand Rock Road just south of the Village park and north to Stonefield Drive.

Crosswalk Improvements

Residents have stated in public meetings that they would like to have more crosswalks and improve the safety of the existing crosswalks. These improvements can be undertaken concurrently with the future projects identified along Main Street as mentioned above. Separating the intersection improvements into individual projects may cause conflicts with the broader vision of the Great Streets initiative, which was well thought out and developed with the long-term goals of the Village. It is recommended that crosswalk improvements be undertaken with the goals and visions of that plan at the forefront.

Improving Existing Pedestrian Travel Routes

The existing trail in the Village park does not meet the standards for a shared-use trail. The trail is narrow and uneven at times. The trail does not meet ADA compliance and the Village should consider improvements to this well used and appreciated piece of infrastructure. It is recommended that long term goals should consider widening of the trail and making improvements to accommodate all forms of pedestrian travel. The improvement of this trail will also become an instrument and focal point to the connection for the future shared-use trails. The Village should begin earmarking funds for these improvements and seeking grants through MEPRD for improvements to their existing park. Other funding sources discussed in the following sections may not be eligible for improvements, repairs, or maintenance of this existing trail loop.



The Village should also consider improvements to the on-road portion of the existing bicycle and pedestrian facilities by adding additional signage and improving pavement marking for safety and wayfinding. High-type pavements (i.e. hot-mix asphalt or concrete) should be considered as long-term goals for these on-road facilities. The high-type pavements allow for better pavement marking delineation and can eliminate the need for oil and chip, which tends to have poor traction qualities.

Construction of an Off-Road Shared-Use Path

It is recommended that a proposed shared-use path be constructed to connect the southern neighborhoods to the Village park and existing on-road travel routes.

The alignment options of the off-road shared-use trail were discussed in the previous sections. Option 1 will primarily parallel right-of-way owned by the Village; however, it is anticipated that land acquisition will be required.

The alignment for Option 2 will be along right-of-way owned and maintained by IDOT and coordination with this agency shall be undertaken to determine the suitability of the alignment.

After construction of a shared-use path the Village should continue to explore ways to add rest areas within their system.

It is also recommended to continue planning for future trails looking toward the east on Press Road, as well as to the west and north along Turner Hall Road, High Prairie School Road, and Douglas Road.

Specific Action Plan and Goals

The following specific action plans and goals are meant to represent the goals that are believed to be reasonable and achievable. Depending on the amount of time and resources devoted to developing the goals listed below will determine the actual time frame for achievement of these goals.

Short-Term Goals (0-3 Years)

Goal #1 - Maintenance of Existing Park Trails

Reasoning - The existing trail system is a vital piece of infrastructure that is widely used and provides an important connection for future trails, and it is considered the focal point of the non-motorized travel system for many residents.

Specifics – The cost for the maintenance of existing facilities can vary widely as conditions worsen. The Village should monitor conditions and look at past history of performance, as well historic costs to maintain these facilities. Continuing to earmark funds to cover these costs and maintain these facilities should be a priority. It is recommended to include escalation factor to cover increased labor and material costs.

Goal #2 - Earmarking Funds for Future Planning, Design and Construction of an Off-Road Trail

Reasoning - Regardless of which option or alignment is chosen for a future off-road trail, it is anticipated that the Village will incur a significant cost associated with this long-term goal. By earmarking funds in the early stages, even before an option has been selected, the Village will be in a position to execute the project during the later stages of the process as matching funds and the final planning processes have been completed.



Specifics - Each of the options presented has different costs associated with it. In order to design and construct an initial phase of construction on the timeline presented herein, it is recommended that an average of \$10,000 per year be earmarked or leveraged for these improvements. These funds can be combined with grant funds discussed in the following sections to construct an initial phase of improvement with logical termini.

Goal #3 - Begin Discussions with Property Owners Regarding Purchase of Property

Reasoning - Each of the options for construction of an off-road trail will require the purchase of property. The ability to purchase property will dictate the viability of each of the options. The Village should have a good understanding of which options are feasible and which are not early in the planning process.

Specifics - Depending on which property owners are being approached the extent of the property acquisition will change. In general, a minimum 20-foot-wide corridor will be needed to construct and maintain the new infrastructure. An additional width of easement should be considered for use during the construction of the trail. The exact width of the property acquisition and easements needed will depend upon a number of factors and can only be reasonably determined once a more detailed design is underway. Discussing generalities with the property owners and their openness to sell a piece of property is the first step. Property purchase may be congruent with existing property lines or rights-of-way; however, future roadway planning, and developments should be considered before finalization

Goal #4 - Coordination with IDOT

Reasoning – Since IDOT owns and maintains IL 159 coordination concerning improvements surrounding this roadway should be discussed with them in detail. Specifically, IDOT should be consulted to determine the suitability of the off-road trail shown as Option 2. Depending on their future plans for roadway improvements and their jurisdictional requirements this Option may not be possible. Having knowledge of the potential options for improvements should be discovered early in the planning process.

Specifics - As with any of the planning options, considerations for future roadway improvements and developments may affect the ability to implement an improvement, whether it be an off-road trail or a crosswalk improvement.

Goal #5 – Start the Planning Process for Improvements to Knab Road

Reasoning - Knab Road is functionally classified as a minor collector. This roadway has seen a rise in usage as developments within the area have increased. Improvements to this roadway should be considered as these improvements will affect several of the potential alignment options.

Specifics - Since Knab Road is functionally classified it is eligible for federal funding through the Surface Transportation Program (STP) administered by East-West Gateway Council of Governments (EWGCOG). Roadway improvements using federal funds must also provide inclusions for pedestrian and bicycle users. This requirement of all roads for all users will both aid and will likely affect the potential alignment options presented herein and thus this planning process should begin in the short-term.



Mid-Term Goals (3-7 Years)

Goal #1 - Maintenance of Existing Park Trails

Reasoning – Continued maintenance of the existing infrastructure should be prioritized until the useful life has been consumed.

Specifics – As the Village continues to monitor the conditions and cost associated with the maintenance of the existing system an evaluation must be completed to determine at what point maintaining the system no longer is cost effective. Once cost-effective maintenance has expired the Village should switch their focus to replacement of these important resources.

Goal #2 - Earmarking Funds for Future Planning, Design and Construction of an Off-Road Trail

Reasoning – During the short-term goal period it is anticipated that the Village may have been able to earmark or leverage as much as \$30,000, a significant sum of money. However, it is anticipated that implementation of an initial phase of construction would require a local share that is still beyond this available amount.

Specifics - It is recommended that the Village continue to save a minimum of \$10,000 per year so that a local match can be combined with grant funds discussed to construct an initial phase with logical termini.

Goal #3 – Select the Alignment for the Proposed Off-Road Trail

Reasoning – During the short-term goal period the Village should have been able to determine, which alignment options were viable and where property would be available for purchase. Until an alignment has been selected the ability to apply for grants is inhibited. Most grant opportunities require the inclusion of specific starting, ending points and other details for implementation of construction.

Specifics – Many granting authorities will require the local agency to provide certification that right-of-way and matching funds can be secured within a reasonable timeframe. By completing the upfront work of earmarking funds and beginning discussions with property owners the Village's authorized representative will be able to make such certifications during this stage of the process.

Goal #4 – Begin the Planning Process for a Specific Off-Road Trail

Reasoning – Until reasonable progress has been made in the planning and design of a specific off-road trail the exact extent of the property required will not be known. Selecting an alignment that is cost-effective and practical, as well as considering future roadway improvements or developments is recommended in this step of the process.

Specifics – This stage of the planning process can also include the application for grants through a number of different sources as discussed in later sections. Once an alignment and option have been chosen the ability to effectively secure grant funds, determine costs more precisely and plan for the purchase of property will become a realization.



Goal #5 – Begin Property Acquisition

Reasoning – Until all property has been acquired the Village's ability to move forward with implementation of a project will be hindered. The property acquisition process can be lengthy and it is recommended that this process be undertaken with care and diligence.

Specifics – Through the creation of right-of-way plats, legal descriptions and negotiations with owners, property can be purchased. The Village should recognize that some funding agencies have limitations and specific requirements about the negotiation and property purchase process. The ability to use grant funds can be jeopardized if these processes are not followed properly. It is recommended that professionals be consulted to lead the Village through the process at this critical stage.

Long Term Goals (7-10 Years)

Goal #1 – Implementation of an Initial Phase of Construction

Reasoning – During the short-term and mid-term phases of the project it is anticipated that all property has been acquired and that matching funds have been accrued for the construction of the initial phase of construction.

Specifics – Implementation of construction of an off-road facility should be designed by professionals, which is typically required by most funding agencies. Specific design plans, bidding documents and construction oversight will lead to successful completion of a project that will provide use for the residents of the Village for years to come.

Goal #2 – Improvements to Existing Park Trails and On-Road Facilities

Reasoning – As mentioned during the mid-term goal section, the ability to cost-effectively maintain the existing trails and on-road facilities may be questionable as deterioration happens over the years. As a long-term goal, the Village should be planning for significant upgrades to these existing systems.

Specifics – The existing trail systems may be able to be upgraded through widening or may require construction. On-road facilities may be able to be improved through milling and resurfacing and enhanced wayfinding. The suitability and appropriateness of the improvements will need to be looked at on a case-by-case basis.

Goal #3 – Coordination with Other Municipalities and Jurisdictions for Future Expansion of the System

Reasoning – As the Village completes the initial phases of construction and other short and mid-term goals become a reality the vision for additional expansion and making connections to other subdivisions and new developments at the outer reaches of the Village will be desired. This long-term goal to look toward the future expansion of the system will accommodate the future growth of the Village and sustain connectivity.

Specifics – Continued planning, pursuit of property, and coordination with outside agencies is vital for the ability of the Village to continue growth in a sustainable way. Specifically, future routes to the east have been identified along Press Road and possible extensions of Fischer Road. To the north and west, several routes have been identified including, Turner Hall Road, High Prairie School Road, Lunch Road, and Douglas Road. As developments and future planning opportunities arise within these areas the Village should consider the connectivity of all users to avoid segregation of their community in the future.



POTENTIAL FUNDING SOURCES

Bicycle and pedestrian improvements are prime candidates for state and federal funding programs. Below are some examples of funding sources the Village could apply for.

- 1. CMAQ (Congestion Mitigation and Air Quality) (https://www.ewgateway.org/transportation-planning/transportation-improvement-program/competitive-transportation-programs/cmaq/)
 - a. CMAQ is one of the programs that EWGCOG administers. They are included in the TIP (Transportation Improvement Program) that develops the St. Louis region. The funding is used to improve air quality and reduce congestion for area that do not meet the National Ambient Air Quality Standards.
 - b. The awarded funds are up to 80% federal with 20% local funding and include preliminary engineering, right of way acquisition, construction, and construction engineering.
- 2. Community Development Block Grant (CDBG)
 - a. CDBG funds are available to assist St. Clair County communities to meet their greatest economic and community development needs, with an emphasis on helping persons of low to moderate-income. To receive funding, programs must meet one of the following objectives
 - i. Benefit low and moderate-income persons
 - ii. Aid in the prevention or elimination of slums and blight
 - iii. Meet other community development needs that pose a serious and immediate threat to the health and welfare of the community
- 3. Recreation Trails Program (RTP)

(https://www2.illinois.gov/dnr/AEG/Pages/FederalRecreationalTrailsProgram.aspx)

- a. The Federal RTP was created through the National Recreational Trail Fund Act as part of the Intermodal Surface Transportation Efficiency Act of 1991 and re-authorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. This program provides funding assistance for acquisition, development, rehabilitation, and maintenance of both motorized and non-motorized recreation trails. By law, 30% of each state's RTP funding must be earmarked for motorized trail projects, 30% for non-motorized trail projects and the remaining 40% for multi-use (diversified) motorized and non-motorized trails, or a combination of either.
- b. The RTP program can provide up to 80% federal funding on approved projects and requires a minimum 20% non-federal funding match. Applications for grant assistance must be received by Illinois Department of Natural Resources no later than March 1 of each calendar year. Awards are generally announced within 180 days following the application deadline date.



c. Example projects

- i. Trail construction and rehabilitation
- ii. Restoration of areas adjacent to trails damaged by unauthorized trail use
- iii. Construction of trail-related support facilities and amenities
- iv. Acquisition from willing sellers of trail corridors through easements or fee simple title
- d. IMPORTANT all applicants <u>MUST</u> be registered with Grant Accountability and Transparency Act (GATA) prior to application deadline date.
- 4. Bike Path Program (https://www2.illinois.gov/dnr/grants/Pages/BikePathProgram.aspx)
 - a. The Illinois Bicycle Path Grant Program was created in 1990 to financially assist eligible units of government to acquire, construct, and rehabilitate public, non-motorized bicycle paths and directly related support facilities. Grants are available to any local government agency having statutory authority to acquire and develop land for public bicycle path purposes. Revenue for the program comes from a percentage of vehicle title fees collected pursuant to Section 3-821 (f) of the Illinois Vehicle Code.
 - b. This grant has a grant period of 2 years, and they typically range from \$0 to \$200,000 to cover 50% of the project cost.
 - c. Eligible projects include
 - Land acquisition of property in fee simple title, permanent easements, or long-term leases, for securing a linear corridor/right-of-way to be used for bicycle path development
 - ii. New bicycle path development (Must include trail construction. Site clearing and grading, surfacing, drainage, bridging, access control devices, fencing, & signs are eligible project components)
 - iii. Bicycle path renovation (May include site clearing and grading, surfacing, drainage, bridging, access control devices, fencing, & signs)
 - iv. Bicycle path support facilities and/or amenities (For example: parking areas, access roads, shelters, lighting, benches, restrooms, safety lighting, potable water supply, and architectural/engineering services deemed necessary for proper design & construction)



- 5. **Illinois Transpiration Enhancement Program (ITEP)** (https://idot.illinois.gov/transportation-system/local-transportation-partners/county-engineers-and-local-public-agencies/funding-opportunities/ITEP)
 - a. ITEP establishes supplemental state funding for projects in the categories of pedestrian and bicycle facilities and the conversion of abandoned railroad corridors to trails. It is a highly competitive form of acquiring funding. In 2020, 270 projects applied for funding and only 99 were chosen with a total of \$105.9 million awarded. ITEP is a reimbursable grant program, which requires an interagency/joint funding agreement that details the project scope of work and cost participation. The project sponsor must pay preliminary engineering costs up-front and will be reimbursed as the sponsor submits the paperwork documenting implementation. Depending upon whether the project is local-let or state-let, the same conditions may apply for the construction phase.
 - b. IMPORTANT all applicants MUST be registered with GATA prior to application deadline date.
- 6. Open Space Lands Acquisition and Development program & Land and Water Conservation Fund program (OSLAD & LWCF)

(https://www2.illinois.gov/dnr/grants/Pages/OpenSpaceLandsAquisitionDevelopment-Grant.aspx)

- a. OSLAD is a state-financed grant program funding assistance to local government agencies for acquisition and/or development of land for public parks and open space.
- b. LWCF is a federal program that is similar to OSLAD in funding, objectives, and general rules.
- c. Funding assistance is up to 50% and can be as much as \$750,000 for acquisition projects and \$400,000 for development/renovation projects.
 - i. OSLAD distressed communities can get up to 90%
- d. These grants are used for local governments to acquire and develop land for public indoor/outdoor park, recreation, or conservation areas
- e. Eligible project types
 - i. (OSLAD and LWCF) Acquisition of land for new park sites or park expansion
 - ii. (OSLAD only) Development/Renovation of
 - 1. Picnic and playground facilities
 - 2. Sports courts and play fields
 - 3. Park roads and paths, parking, utilities, and restrooms
 - 4. Architectural/engineering (A/E) services for design and construction
- 7. Safe Streets and Roads for All (SS4A) (https://www.transportation.gov/grants/SS4A)



- a. SS4A is a new federal grant program with over \$5 billion in appropriated funds over the next 5 years, with up to \$1 billion becoming available in the fiscal year 2022. The program funds regional, local, and tribal initiatives through grants to prevent roadway deaths and serious injury.
- b. Eligible project types
 - i. Develop or update a comprehensive safety action plan (Action Plan).
 - ii. Conduct planning, design, and development activities in support of an Action Plan.
 - iii. Carry out projects and strategies identified in an Action Plan.
 - 1. Low-cost roadway safety treatments
 - 2. Transforming a roadway corridor
 - 3. Installing pedestrian safety enhancements
 - 4. Supporting the development of bikeway networks
- c. Application deadline September 15, 2022
 - i. Award announcements are expected end of calendar year 2022 or early 2023.



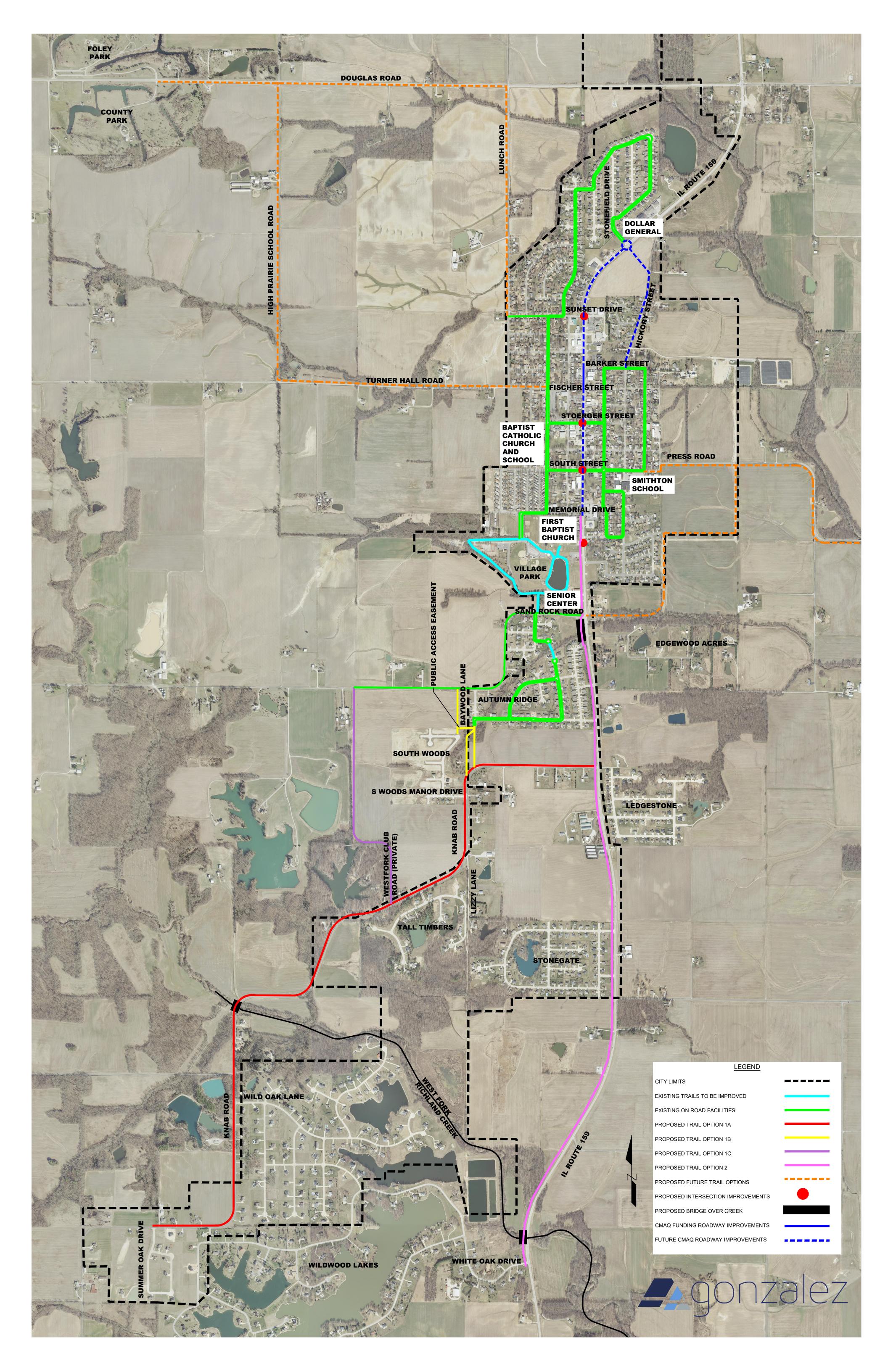
APPENDICIES

- A. Overall Map
- B. Typical Sections
- C. Opinion of Probable Cost
- D. Surveys and Summary



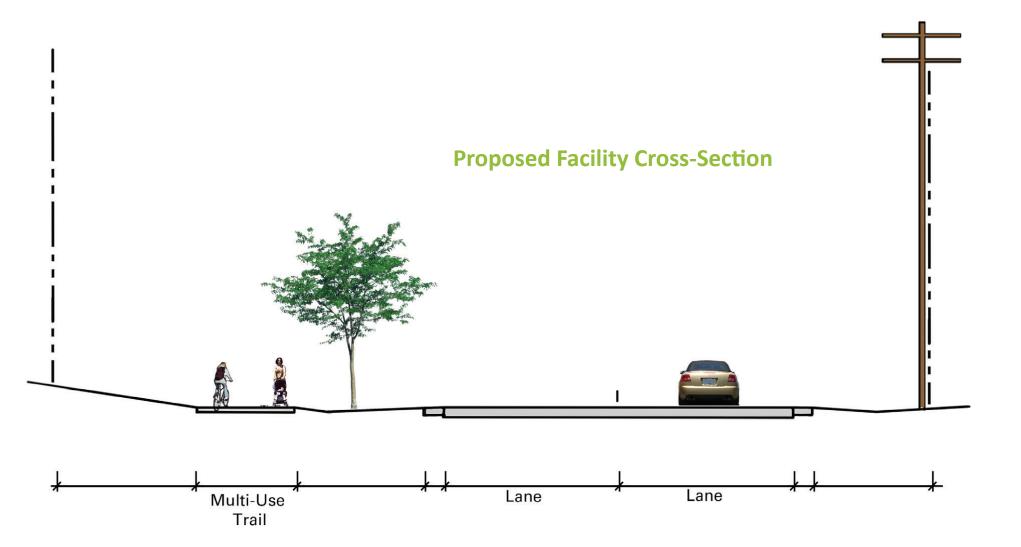
APPENDIX A

Overall Map with Recommendations

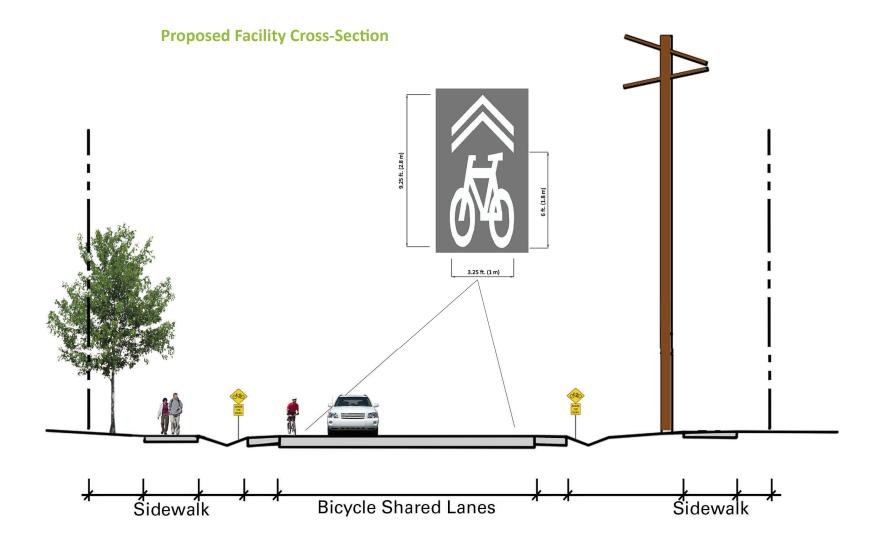


APPENDIX B

Typical Sections







APPENDIX C

Opinion of Probable Cost

PRELIMINARY COST ESTIMATE

WALKING-RUNNING-BIKING FACILITIES ESTIMATE PER LINEAL FOOT OF IMPROVEMENT

IMPROVEN	IENTS TO EXISTING INFRASTRUCTURE (PARK TRAIL)					
Widen to 10' w/3" HMA Surface w/8" Aggregate Base + Resurfacing						
	Clearing and Earth Excavation	\$7.10				
	Aggregate Base Course	\$7.40				
	Hot-Mix Asphalt Surface	\$16.10				
	Misc. Items (Signs, Markings, Culverts, Seeding, Etc.)	\$9.70				
	Contingency (20%)	<u>\$8.06</u>				
	Rounded Total - Per Trail Centerline	\$48				
SHARED U	SE IMPROVEMENTS (ON ROAD FACILITY)					
	10' Wide - 2" Mill and Surface & Marking/Signage					
	HMA Surface Removal (Milling)	\$5.60				
	Hot-Mix Asphalt Surface	\$14.30				
	ADA Compliant Crossings Improvements	\$5.00				
	Misc. Items (Traffic Control, Signs, Markings, Etc.)	\$7.00				
	Contingency (20%)	<u>\$6.38</u>				
	Rounded Total - Per Improved Lane	\$38				
SIDEWALK	IMPROVEMENTS (NEW FACILITIES)					
	5' Wide - 4" Portland Cement Concrete					
	Clearing and Earth Excavation	\$2.20				
	Portland Cement Concrete Sidewalk	\$32.50				
	ADA Compliant Crossings Improvements	\$5.00				
	Misc. Items (Traffic Control, Signs, Markings, Seeding, Etc.)	\$13.60				
	Contingency (20%)	<u>\$10.66</u>				
	Rounded Total - One Side Only	\$64				

Note: Estimates do not assume embankments, major drainage structures or bridges.

Estimates do not include any ROW, easement or engineering costs

Estimates are in 2022 dollars



PROJECT COST ESTIMATE - BUDGET

OPTION 1A COMPREHENSIVE TRAIL PLAN SMITHTON, ILLINOIS

Section: Off Road Trail Along Knab Road from Summer Oak Drive to IL 159

Length: 13500 L.F. 2.56 Mi.

Width: 10 FT. EOP-EOP

<u>ITEM</u>	<u>UNIT</u>	QUANTITY	UNIT PRICE		COST
CLEARING	SY	7,700	\$ 10.00	\$	77,000.00
EXCAVATION	CY	10,000	\$ 50.00	\$	500,000.00
EMBANKMENT	CY	250	\$ 50.00	\$	12,500.00
SIDEWALK REMOVAL	SF	2,100	\$ 3.00	\$	6,300.00
CURB AND GUTTER REMOVAL	LF	200	\$ 10.00	\$	2,000.00
DRIVEWAY PAVEMENT REMOVAL	SY	680	\$ 15.00	\$	10,200.00
PCC SIDEWALK 4"	SF	20	\$ 8.00	\$	160.00
PCC CURB AND GUTTER	LF	200	\$ 50.00	\$	10,000.00
PCC DRIVEWAY PAVEMENT 6"	SY	680	\$ 75.00	\$	51,000.00
HMA SURFACE COURSE 3"	TON	2,520	\$ 150.00	\$	378,000.00
AGGREGATE BASE COURSE 8"	SY	18,680	\$ 20.00	\$	373,600.00
STORM SEWER PIPE	LF	360	\$ 100.00	\$	36,000.00
STORM SEWER STRUCTURE	EA	6	\$ 2,500.00	\$	15,000.00
SITE RESTORATION AND SEEDING	LS	1	\$ 50,000.00	\$	50,000.00
EROSION CONTROL	LS	1	\$ 25,000.00	\$	25,000.00
PEDESTRIAN BRIDGE	LF	80	\$ 4,200.00	\$	336,000.00
TRAFFIC CONTROL	LS	1	\$ 50,000.00	\$	50,000.00
MARKING/SIGNS/BOLLARDS/MISC.	LS	1	\$ 13,500.00	\$	13,500.00
UTILITY ADJUSTMENTS	LS	1	\$ 50,000.00	\$	50,000.00
MOBILIZATION	LS	1	\$ 119,800.00	\$	119,800.00
CONTINGENCY (30%)				\$	634,800.00
TOTAL CONSTRUCTION COSTS				\$ 2	2,751,000.00

Preliminary & Construction Engineering Not Included ROW & Easement Acquisition Not Included



OPTION 1B (1) COMPREHENSIVE TRAIL PLAN SMITHTON, ILLINOIS

Section: Off Road Trail from South Woods Subdivision to Sand Rock Road

Length: 790 L.F. 0.15 Mi.

Width: 10 FT. EOP-EOP

<u>ITEM</u>	<u>UNIT</u>	QUANTITY	UNIT PRICE	COST
CLEARING	SY	0	\$ 10.00	\$ -
EXCAVATION	CY	585	\$ 50.00	\$ 29,250.00
EMBANKMENT	CY	15	\$ 50.00	\$ 750.00
SIDEWALK REMOVAL	SF	0	\$ 3.00	\$ -
CURB AND GUTTER REMOVAL	LF	20	\$ 10.00	\$ 200.00
DRIVEWAY PAVEMENT REMOVAL	SY	0	\$ 15.00	\$ -
PCC SIDEWALK 4"	SF	0	\$ 8.00	\$ -
PCC CURB AND GUTTER	LF	20	\$ 50.00	\$ 1,000.00
PCC DRIVEWAY PAVEMENT 6"	SY	0	\$ 75.00	\$ -
HMA SURFACE COURSE 3"	TON	147	\$ 150.00	\$ 22,050.00
AGGREGATE BASE COURSE 8"	SY	1,053	\$ 20.00	\$ 21,060.00
STORM SEWER PIPE	LF	60	\$ 100.00	\$ 6,000.00
STORM SEWER STRUCTURE	EA	0	\$ 2,500.00	\$ -
SITE RESTORATION AND SEEDING	LS	1	\$ 2,500.00	\$ 2,500.00
EROSION CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
PEDESTRIAN BRIDGE	LF	0	\$ 4,200.00	\$ -
TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
MARKING/SIGNS/BOLLARDS/MISC.	LS	1	\$ 2,500.00	\$ 2,500.00
UTILITY ADJUSTMENTS	LS	1	\$ 2,500.00	\$ 2,500.00
MOBILIZATION	LS	1	\$ 5,600.00	\$ 5,600.00
CONTINGENCY (30%)				\$ 29,500.00
TOTAL CONSTRUCTION COSTS				\$ 128,000.00



OPTION 1B (2) COMPREHENSIVE TRAIL PLAN SMITHTON, ILLINOIS

Section: Off Road Trail from Knab Road to Autumn Ridge Subdivision

Length: 1870 L.F. 0.35 Mi.

Width: 10 FT. EOP-EOP

<u>ITEM</u>	<u>UNIT</u>	QUANTITY	UNIT PRICE	COST
CLEARING	SY	700	\$ 10.00	\$ 7,000.00
EXCAVATION	CY	1,385	\$ 50.00	\$ 69,250.00
EMBANKMENT	CY	30	\$ 50.00	\$ 1,500.00
SIDEWALK REMOVAL	SF	0	\$ 3.00	\$ -
CURB AND GUTTER REMOVAL	LF	0	\$ 10.00	\$ -
DRIVEWAY PAVEMENT REMOVAL	SY	22	\$ 15.00	\$ 330.00
PCC SIDEWALK 4"	SF	0	\$ 8.00	\$ -
PCC CURB AND GUTTER	LF	0	\$ 50.00	\$ -
PCC DRIVEWAY PAVEMENT 6"	SY	22	\$ 75.00	\$ 1,650.00
HMA SURFACE COURSE 3"	TON	350	\$ 150.00	\$ 52,500.00
AGGREGATE BASE COURSE 8"	SY	2,516	\$ 20.00	\$ 50,320.00
STORM SEWER PIPE	LF	60	\$ 100.00	\$ 6,000.00
STORM SEWER STRUCTURE	EA	3	\$ 2,500.00	\$ 7,500.00
SITE RESTORATION AND SEEDING	LS	1	\$ 4,000.00	\$ 4,000.00
EROSION CONTROL	LS	1	\$ 3,500.00	\$ 3,500.00
PEDESTRIAN BRIDGE	LF	0	\$ 4,200.00	\$ -
TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
MARKING/SIGNS/BOLLARDS/MISC.	LS	1	\$ 2,500.00	\$ 2,500.00
UTILITY ADJUSTMENTS	LS	1	\$ 2,500.00	\$ 2,500.00
MOBILIZATION	LS	1	\$ 12,700.00	\$ 12,700.00
CONTINGENCY (30%)			-	\$ 67,100.00
TOTAL CONSTRUCTION COSTS				\$ 291,000.00



OPTION 1C COMPREHENSIVE TRAIL PLAN SMITHTON, ILLINOIS

Section: Off Road Trail from near Westfork Club Road to Sand Rock Road

Length: 4240 L.F. 0.80 Mi.

Width: 10 FT. EOP-EOP

<u>ITEM</u>	<u>UNIT</u>	QUANTITY	UNIT PRICE	COST
CLEARING	SY	3,600	\$ 10.00	\$ 36,000.00
EXCAVATION	CY	3,200	\$ 50.00	\$ 160,000.00
EMBANKMENT	CY	75	\$ 50.00	\$ 3,750.00
SIDEWALK REMOVAL	SF	0	\$ 3.00	\$ -
CURB AND GUTTER REMOVAL	LF	0	\$ 10.00	\$ -
DRIVEWAY PAVEMENT REMOVAL	SY	0	\$ 15.00	\$ -
PCC SIDEWALK 4"	SF	0	\$ 8.00	\$ -
PCC CURB AND GUTTER	LF	0	\$ 50.00	\$ -
PCC DRIVEWAY PAVEMENT 6"	SY	0	\$ 75.00	\$ -
HMA SURFACE COURSE 3"	TON	791	\$ 150.00	\$ 118,650.00
AGGREGATE BASE COURSE 8"	SY	5,653	\$ 20.00	\$ 113,060.00
STORM SEWER PIPE	LF	80	\$ 100.00	\$ 8,000.00
STORM SEWER STRUCTURE	EA	0	\$ 2,500.00	\$ -
SITE RESTORATION AND SEEDING	LS	1	\$ 5,000.00	\$ 5,000.00
EROSION CONTROL	LS	1	\$ 5,000.00	\$ 5,000.00
PEDESTRIAN BRIDGE	LS	0	\$ 100,000.00	\$ -
TRAFFIC CONTROL	LS	1	\$ 5,000.00	\$ 5,000.00
MARKING/SIGNS/BOLLARDS/MISC.	LS	1	\$ 4,250.00	\$ 4,250.00
UTILITY ADJUSTMENTS	LS	1	\$ 5,000.00	\$ 5,000.00
MOBILIZATION	LS	1	\$ 27,800.00	\$ 27,800.00
CONTINGENCY (30%)				\$ 147,500.00
TOTAL CONSTRUCTION COSTS				\$ 639,000.00



OPTION 2 COMPREHENSIVE TRAIL PLAN SMITHTON, ILLINOIS

Section: Off Road Trail Along IL 159 from Wildwood Subdivision to the City Park

Length: 14000 L.F. 2.65 Mi.

Width: 10 FT. EOP-EOP

<u>ITEM</u>	<u>UNIT</u>	QUANTITY	UNIT PRICE		COST
CLEARING	SY	8,600	\$ 10.00	\$	86,000.00
EXCAVATION	CY	10,370	\$ 50.00	\$	518,500.00
EMBANKMENT	CY	1,000	\$ 50.00	\$	50,000.00
SIDEWALK REMOVAL	SF	300	\$ 3.00	\$	900.00
CURB AND GUTTER REMOVAL	LF	60	\$ 10.00	\$	600.00
DRIVEWAY PAVEMENT REMOVAL	SY	608	\$ 15.00	\$	9,120.00
PCC SIDEWALK 4"	SF	0	\$ 8.00	\$	-
PCC CURB AND GUTTER	LF	60	\$ 50.00	\$	3,000.00
PCC DRIVEWAY PAVEMENT 6"	SY	608	\$ 75.00	\$	45,600.00
HMA SURFACE COURSE 3"	TON	2,613	\$ 150.00	\$	391,950.00
AGGREGATE BASE COURSE 8"	SY	19,275	\$ 20.00	\$	385,500.00
STORM SEWER PIPE	LF	240	\$ 100.00	\$	24,000.00
STORM SEWER STRUCTURE	EA	7	\$ 2,500.00	\$	17,500.00
SITE RESTORATION AND SEEDING	LS	1	\$ 50,000.00	\$	50,000.00
EROSION CONTROL	LS	1	\$ 25,000.00	\$	25,000.00
PEDESTRIAN BRIDGE	LF	200	\$ 4,200.00	\$	840,000.00
TRAFFIC CONTROL	LS	1	\$ 50,000.00	\$	50,000.00
MARKING/SIGNS/BOLLARDS/MISC.	LS	1	\$ 14,000.00	\$	14,000.00
UTILITY ADJUSTMENTS	LS	1	\$ 10,000.00	\$	10,000.00
MOBILIZATION	LS	1	\$ 151,300.00	\$	151,300.00
CONTINGENCY (30%)				\$	801,900.00
TOTAL CONSTRUCTION COSTS				\$ 3	3,475,000.00



APPENDIX D

Survey and Summary



Community Survey Comprehensive Trail Plan

WALKING

- 1. What is the main reason you walk?
 - a. For fun/recreation
 - b. To get exercise
 - c. To save money on transportation
 - d. To improve the environment
 - e. I do not have a car or do not have a drivers license
 - f. I never walk
- 2. How would you rate the current conditions for walking in Smithton?
 - a. Excellent
 - b. Good
 - c. Fair
 - d. Poor
 - e. I don't know
- 3. How often do you walk to the following:

	Daily	At least once per week	At least once per month	At least once per year	Never	Never, but I would like to
Go to work						
Go to school, take children to school						
Get to and from school bus stops						
Go shopping or out to eat						
Run Errands						
Exercise or recreation						

- 4. Would you walk more often if new sidewalks, trails, and safer street / road crossings were provided?
 - a. Yes
 - b. No
- 5. What factors discourage you from walking in Smithton?

	Major	Minor
	Reason	Reason
Lack of sidewalks		
Crossing busy roads		
Sidewalks/crosswalks in need of repair		
Automobile traffic and speed		
Destinations too far away		

	Major	Minor
	Reason	Reason
Lack of crosswalks		
I do not know a safe route		
Bad driver behavior		
Crime		

Bicycling

- 1. What is the main reason you ride a bicycle?
 - a. For fun/recreation
 - b. To get exercise
 - c. I do not own a bicycle
 - d. I never ride a bicycle
 - e. To save money on transportation
 - f. To improve the environment
 - g. I do not have a car or do not have a drivers license
- 2. How would you rate the current conditions for bicycling in Smithton?
 - a. Excellent
 - b. Good
 - c. Fair
 - d. Poor
 - e. I don't know
- 3. How often do you ride a bicycle to do the following:

	Daily	At least once per week	At least once per month	At least once per year	Never	Never, but I would like to
Go to work						
Go to school, take children to school						
Get to and from school bus stops						
Go shopping or out to eat						
Run Errands						
Exercise or recreation						

- 4. Would you bike more often if more bicycle routes, bicycle lanes, and safer street and road crossings were provided?
 - a. Yes
 - b. No
- 5. What factors discourage you from bicycling in Smithton?

	Major	Minor
	Reason	Reason
Inadequate shoulder width		
Lack of off-street bike facilities (shared-		
use paths)		
Automobile traffic and speed		
Crossing busy roads		
Poor maintenance of existing bike		
facilities		
Destinations are too far away		
I do not have a bicycle		

	Major Reason	Minor Reason
Debris on road/shoulder		
Lack of on-street bike		
facilities (bike lanes)		
Bad driver behavior		
I do not know a safe route		
No bike parking at		
destinations		
Crime		

Bicycling and/or Walking Summary

1.	a. b.	Very i Some	nt to you is improving walking and bicy mportant what important nportant	cling cor	nditions	in Smithton?	
2.	and bi a. b.	cycling Yes No	the Village of Smithton should conside) as a priority? eference	r non-m	otorized	transportation	on (i.e., walking
3.			ntions in and around Smithton would you ded for add-on destinations)	ou most	like to ge	et to by bike o	or foot?
				Yes	No		
			Local Businesses in Smithton				
			Smithton Park				
			Local Churches				
			Public Library				
			Community Garden				
			Smithton Turner Park				
			Smithton Consolidated School				
			St. John the Baptist Catholic School				
4.	Your lo	ocation	- Address and/or Subdivision?				
5.	What	is your	age range?				
	-18		18-25 26-35 36-45	46-60		61-74	75+

What is the main reason you walk?

•		
	TOTALS	
For Fun/Recreation	18	31%
To get exercise	39	66%
To save money on transporation		0%
To improve the environment	2	3%
I do not have a car do not have a drivers license		0%
l never walk		0%
Total Answered	59	
	To get exercise To save money on transporation To improve the environment I do not have a car do not have a drivers license I never walk	For Fun/Recreation 18 To get exercise 39 To save money on transporation To improve the environment 2 I do not have a car do not have a drivers license I never walk

How would you rate the conditions for walking in Smithton?

		TOTALS	
a.	Excellent	3	7%
b.	Good	9	21%
c.	Fair	20	47%
d.	Poor	9	21%
e.	I dont know	2	5%

Total Answered 43

How often do you walk to the following?

					Su	rveys 1 thru	46 Totals					
	Daily	On	ce a Week	C	nce a Month		Once a Year		Never		Never, but I would like to	
Go to work	1	2%	0	0%	1	2%	0	0%	22	48%	3	7%
Go to school, take children to school	0	0%	0	0%	0	0%	0	0%	24	52%	2	4%
Get to and from school bus stops	3	7%	0	0%	0	0%	0	0%	25	54%	0	0%
Go shopping or out to eat	0	0%	1	2%	4	9%	2	4%	14	30%	6	13%
Run Errands	1	2%	4	9%	4	9%	2	4%	16	35%	4	9%
Exercise or recreation	24	52%	10	22%	6	13%	1	2%	2	4%	0	0%
Total Answered	29		15		15		5		103		15	i

Would you walk more often if new sidewalks, trails, and road crossings were provided?

		TOTALS	
a.	Yes	37	86%
b.	No	6	14%
	Total Answered	43	

What factors discourage you from walking in Smithton?

Survey	1	thru	46	TOI	PIAT
Juivey		ullu	40	101	MLD

	Major Reason	•	Minor Reason	
Lack of Sidewalks	32	70%	2	4%
Crossing Busy Streets	22	48%	6	13%
Sidewalks/Crosswalks in need of repair	8	17%	10	22%
Automobile Traffic and Speed	26	57%	3	7%
Destination too far away	12	26%	11	24%
Lack of Crosswalks	14	30%	7	15%
I do not a safe route	14	30%	7	15%
Bad Driver Behavior	6	13%	8	17%
Crime			9	20%
Other (too old)	2	4%		
Total				
Total Answered	136		63	

What is the main reason you ride a bicycle?

		TOTALS	
a.	For fun/recreation	23	39%
b.	To get exercise	27	46%
c.	I do not own a bicycle	3	5%
d.	I never ride a bicycle	4	7%
e.	To save money on transportation		0%
f.	To improve the environment	2	3%
g.	I do not have a car or drivers license		0%
	Total Answered	59	

How would you rate the current conditions for bicycling in Smithton?

		TOTALS	
a.	Excellent	1	2%
b.	Good	6	14%
c.	Fair	13	31%
d.	Poor	13	31%
e.	I don't know	9	21%

Total Answered 42

How often do you ride a blke to do one of the following:

	_	Survey 1 thru 46 TOTALS										
	Da	ily	Once a	Week	Once a	month	Once	a Year	Ne	ver	Never, But I would	like to
Go to work	0	0%	0	0%	0	0%	0	0%	18	39%	5	11%
Go to school/take children to school	0	0%	0	0%	0	0%	1	2%	17	37%	4	9%
Get to and from school bus stop	0	0%	1	2%	0	0%	0	0%	20	43%	1	2%
Go shopping or go out to eat	o	0%	0	0%	3	7%	4	9%	13	28%	8	17%
Run Errands	1	2%	0	0%	2	4%	4	9%	11	24%	9	20%
Get Exercise	8	17%	12	26%	4	9%	7	15%	5	11%	2	4%
Total Answered	9		13		9		16		84			29

Would you bike more often if more bicycle routes, lanes, and safer street crossing was provided?

		TOTALS	
a.	Yes	30	79%
b.	No	8	21%

38

Total Answered

What factors discourage your from bicycling in Smithton?

Surveys 1 thru 46 TOTALS

trandamusta Chauddau	Major Reason	450/	Minor Reason	70/
Inadequate Shoulder	21	46%	3	7%
Lack of Off-Street Facilites (shared-use path)	26	57%	3	7%
Automobile Traffic and Speed	27	59%	3	7%
Crossing busy roads	15	33%	8	17%
Poor maintenance of existing bike facilities	4	9%	10	22%
Destinations are too far away	4	9%	12	26%
I do not have a bicycle	3	7%	3	7%
Debris on shoulder	6	13%	13	28%
Lack of On-Street Facilities (bike lane)	20	43%	4	9%
Bad Driver Behavior	8	17%	8	17%
I do not know a safe route	13	28%	4	9%
No bike parking at destination	2	4%	10	22%
Crime		0%	7	15%
Total Answered	149		88	

How important to you is improving walking and biking conditions in Smithton?

		TOTALS	
a.	Very important	36	82%
b.,	Somewhat important	4	9%
C.	Not important	4	9%
	Total Answered	44	

Do you think the village of Smithton should consider non-motorized transportation as a priority?

		TOTALS					
a.	Yes	36	84%				
b,	No	4	9%				
C .,	No preference	3	7%				
	Total Answered	43					

What destination in or around Smithton are you most likley to get to by bike or foot?

	TOTALS	
Local Smithton Business	33	72%
Smithton Park	38	83%
Local Churches	9	20%
Public Library	19	41%
Community Garden	8	17%
Turner Park	25	54%
Smithton Consolidated Schools	13	28%
St. John Catholic Church School	8	17%
Total Anwered	153	

Your loaction - Address and/or Subdivision?

Totals
0
0
0
1
2
2
3
8
8
13

Total Answered 37

What is your age range?

	TOTALS
18-25	0
26-35	1
36-45	7
46-60	12
61-74	21
75+	3

44

Total Anwered

Survey 1	Connect Tall Timbers to town (Adult rider that rides IL-159 with lights & mirror) / Suggests picking up trash along
Survey 2	Knab Road
Survey 3	NIND HOUR
Survey 4	Currently walks in Tall Timbers neighborhood
Survey 5	Repair existing trail / connect subdivisions to Village trail (existing trail) / connect to outside trails
Survey 6	repair existing train, connect subdivisions to vinage train (existing train), connect to outside trains
Survey 7	
Survey 8	
Survey 9	Would like to see all subdivisions connected / Trail to Eckert's, Coffee Mill Diner, Smithton Park
Survey 10	Would like to see all subdivisions connected / Trail to Eckert's, confee will bliffer, smithton Fark
·	Would like to see a path (sidewalk or walking/bike path along IL-159 behind ditch on either side of road from Sandridge Dr. or south entrance of Autumn ridge to Stonegate Subdivision. By doing this, all dubdivisions south of town could access town by back roads leading to this route. Wildwood & South woods could access the route via Knab Rd. Autumn ridge, Ledgestone and Stonegate would have direct access to the route. Many ride along IL-159 on a daily basis & it's extremely dangerous.
Survey 12	
Survey 13	
Survey 14	
Survey 15	
	Would like to see a trail to connect neighborhoods (Especially Southwoods & others along Knab Rd it's dangerous)
Survey 16	/ Connect to downtown businesses
	Would like to see a trail to connect neighborhoods (Especially Southwoods & others along Knab Rd it's dangerous)
Survey 17	/ Connect to downtown businesses
Survey 18	
Survey 19	
Survey 20	
Survey 21	
Survey 22	
Survey 23	
Survey 24	
Survey 25	Share the road existing routes - Streets need sweeping after oiling in August - within 60 days or sostreets are hard
	to run on, especially at intersections - Keep routes local - No need to connect to SCCTD routes
	Would like trail to connect South Subdivisions to the Village. If trail goes as far south as Stonegate & Wildwood, and
Survey 26	trail is on east side of street, then crosswalks need to be put across Rte 159 for safety. Also, prefer bike trail
	separate from streets!
C.,,,,,,,,, 27	Resident's children struggle with not being able to ride their bikes from Wildwood to Village as there is no safe way
Survey 27	for them to get there by foot or bike when parents are not home to take them.
Survey 28	Would like to see multiple miles of connected trails 3-5-10+ / It would be nice if they could be interconnected loops
	or off shoots in different directions to give some variety for walking paths - distances and routes.
Survey 29	
Survey 30	
Survey 31	Would like to see trail from Southwoods to Smithton Park or Village to Orchard Trail
	This resident is a biker. He suggests starting small. Connect all local Subdivisions with NEW asphalt trails. Next,
Survey 32	trunk out to Freeburg, Waterloo, Millstadt, Eckerts, etc. Stay away from heavy traffic, Rte 159
Survey 33	Resident would like to see a route from Wildwood to Lizzy Lane via Knab Road or to Village via IL 159 on a separate
Julyey JJ	but costly path.
Survey 34	

Survey 35	
Survey 36	
Survey 37	Routes need to be safe for children, families, wheelchairs to get to Village and surrounding areas.
Survey 38	Resident does not want a trail near Lizzy Lane and not inside Tall Timbers - Gated Community
Survey 39	
Survey 40	
	Resident does not want a trail in Tall Timbers and not on Lizzy Lane / Feels that there are plenty of areas to
Survey 41	walk/ride within neighborhood
	Resident is against a biking / walking path outside of Tall Timbers if it is on Tall Timbers property because resident
	fears liability for the neighborhood / Scott Saeger responded to this resident's email explaining that if it is
Survey 42	determined that the best route for the trails would be through privately owned property, the ownership of those
	privately owned sections should probably be transferred to the Village since the Village would be responsible for constructing and maintaining the trails.
Survey 43	
	Resident is handicapped (unable to drive) Needs a path from Tall Timbers to downtown so he can use his scooter fo
Survey 44	transportation.
Survey 45	
Survey 46	



Community Survey Comprehensive Trail Plan May 4, 2022 @ 7:00 p.m.

VOTE FOR ONLY ONE (1) IN EACH SECTION

1.	My preference for an off-road facility route is: Option 1A/1B – Along Knab Road to Separate facility between South Woods and Autumn Ridge and onto Sand Rock Road Option 1A/1C – Along Knab Road to Separate facility east of Westfork Club Road and onto Sand Rock Road Option 1A/2 – Along Knab Road to Off-Road Facility Along IL Route 159 Option 2 – Off-Road Facility along IL Route 159 No preference regarding Off-Road Facility Location
2.	My preference to improve existing infrastructure would be to prioritize: Improvements to the existing park facilities, trails, and infrastructure Improved delineation of on-road markings, wayfinding signage and surface improvements Improvements to existing sidewalks and construction of new curb ramps Construction of new sidewalks where none currently exist General maintenance of existing roads and sidewalks No preference regarding improvements of existing infrastructure
3.	My preference for intersection improvements would be to: Make improvements to existing crosswalks through better delineation of pavement markings, signing and upgraded beacons Make improvements to existing crosswalks by providing traffic calming techniques such as installation of "bump outs," refuge islands, changes in pavement type or texture, etc. Install pedestrian activated traffic signals at existing crosswalk location(s) Provide new crosswalk improvements through: i. Delineation of pavement markings, signing and flashing beacons ii. Installation of traffic calming techniques (i.e. bump outs, refuges, islands, etc.) iii. Installation of pedestrian traffic signals No preference regarding intersection improvements
4.	My preference for prioritization of walking-running-biking facilities is to: Construct an off-road facility Make improvements to existing infrastructure Make improvements to intersections No preference regarding the prioritization of walking-running-biking facilities

omments:			

Village of Smithton Community Survey - Comprehensive Trail Plan

	Survey 1	Survey 2	Survey 3	Survey 4	Survey 5	Survey 6	Survey 7	Survey 8	Survey 9	10	11	12	13	14	15	16	TOTALS
1 Preference for Off-Road Facility Route is:																	
Option 1A/1B-Along Knab Rd. to Separate Facility - S. Woods & Autumn Ridge-onto Sand Rock Rd.					1	1	1	1									4
Option 1A/1C-Along Knab Rd. to Separate Facility-East of Westfork Club Rdonto Sand Rock Rd.															1		0
Option 1A/2-Along Knab Rd. to Off-Road Facility Along IL Rte 159	1	1		1					1	1							5
Option 2-Off-Road Facility Along IL Rte 159											1	1	1	1	1	1	6
No Preference Regarding Off-Road Facility Location																	0
Added Option-IL-159 to Stonegate & Knab Rd. to Westfork Club			1														1
2 Preference to Improve Existing Infrastructure would be to Prioritize:																	
Improvements To the Existing Park Facilities, Trails, & Infrastructure			1			1	1	1	1	1	1				1	1	9
Improved Delineation of On-Road Markings, Wayfinding Signage & Surface Improvements																	0
Improvements to Existing Sidewalks & Construction of New Curb Ramps																	0
Construction of New Sidewalks Where None Currently Exist		1			1							1	1	1			5
General Maintenance of Existing Roads & Sidewalks	1																1
No Preference Regarding Improvements of Existing Infrastructure				1													1
3 Preference for Inetersection Improvements Would be to:		1					1	1				1	1	1			
Make Improvements to Existing Crosswalks Through Better Delineation of Pavement Markings, Signing & Beacons	1															ļ	1
Make Improvements to Existing Crosswalks by Providing Traffic Calming Techniques (Bump outs, etc.)		1		1					1	1		1	1	1		<u> </u>	7
Install Pedestrian Activated Traffic Signals at Existing Crosswalk Location(s)																<u> </u>	0
Provide New Crosswalk Improvements - Pavement Markings / Traffic Calming Techniques / Pedestrian Traffic Signals			1		1	1	1				1				1	1	7
No Preference Regarding Intersection Improvements								1									1
4 Preference for Prioritization of Walking-Running-Biking Facilites is to:																	
Construct an Off-Road Facility		1	1	1	1	1	1			1		1	1	1	1	1	12
Make Improvements to Existing Infrastructure	1							1	1		1						4
Make Improvements to Intersections																	0
No Preference Regarding the Prioritization of Walking-Running-Biking Facilities																	0

NOTES FROM COMMUNITY SURVEYS

Survey 2 An off-road facility along Knab Rd. should be a priority to make if more accessible for all subdiv

Survey 4 1st priority should be to control traffic especially near school crossings

Prefer route along Knab Rd. to Rte. 159 - there doesn't appear to be a need to go south of Stonegate

Survey 7 New crosswalks - suggest red & yellow blinking lights or full stop lights

Survey 8 Priority - Improve existing park trails

Wider walking trail / Improve muddy sections / Improve lighting / Keep dogs off walking trail

Survey 11 Wider & more level walking trail / Connect Stonegate to Southwoods, then to Autumn Ridge

Survey 12 Priority-Safety for bike riders - Need path from North entrance to Stonegate to South entrance of Autumn Ridge

Survey 14 $\,$ Need a path from Stonegate to park, Waltons, etc. - It is not safet to walk along Rte. 159 $\,$

Survey 16 Add Safe Street for All (SS4A) as potential funding source. New Federal Program - \$1 billion budget for 5 yrs